

228-707

4/4/2014

1/10



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVENTION

George Meindl
Nufarm America's Inc.
11901 South Austin Ave
Alsip, IL 60803

APR - 4 2014

Subject: Label amendment to clarify language on the label pertaining to its use on St. Augustine grass and equipment for aerial applications.
Product Name: Elliptical Herbicide
EPA Reg. No: 228-707
Decision Number: 480567

Dear Mr. Meindl:

The Agency has received your application to amend the registration for the above product, dated June 27, 2013. The label, submitted under the Federal Insecticide, Fungicide, and Rodenticide Act, is acceptable.

This labeling supersedes all previous accepted labeling for this product. Please submit one (1) copy of the final printed label, incorporating the modifications above, before the product is released for shipment. A stamped copy of the label is enclosed for your records.

If you have questions or concerns regarding this letter, please contact Shanta Adeeb (703) 347-0502 or email at adeeb.shanta@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "K. Montague", enclosed within a large, hand-drawn oval.

Kathryn V. Montague
Product Manager 23
Herbicide Branch
Registration Division (7505P)

clean 2/10

Elliptical®

HERBICIDE

FOR SELECTIVE BROADLEAF WEED CONTROL IN ORNAMENTAL TURF LAWNS (RESIDENTIAL, INDUSTRIAL AND INSTITUTIONAL), PARKS, CEMETERIES, AND GOLF COURSES (FAIRWAYS, APRONS, TEES, AND ROUGHS). ALSO FOR USE ON NON-CROP AREAS AND ON SOD FARMS.

CONTAINS 2,4-D, FLUROXYPYR AND DICAMBA

CONTROLS: Black medic, Chickweed, Clover, Cocklebur, Dandelion, Dogfennel, Horsetail, Knotweed, Kochia, Oxalis, Pigweed, Plantain, Thistle, Toadflax, Vetch and many other species of broadleaf weeds; some of which are listed on this label.

ACTIVE INGREDIENTS:

Dimethylamine Salt of 2,4-Dichlorophenoxyacetic Acid*	13.65%
1-Methylheptyl Ester of Fluroxypyr:[(4-amino-3-5-dichloro-6-fluoro-2-pyridinyl)oxy]acetic Acid, 1-methylheptyl Ester**	2.04%
Dicamba (3,6-Dichloro-o-Anisic Acid)***	1.42%

OTHER INGREDIENTS:	82.89%
TOTAL:	100.00%

By Isomer Specific AOAC Method, Equivalent to:

*2,4-Dichlorophenoxyacetic Acid	11.34%, 1.0 lbs/gal.
**[(4-amino-3-5-dichloro-6-fluoro-2-pyridinyl)oxy]acetic Acid	1.42%, 0.125 lbs/gal.
***3,6-Dichloro-o-Anisic Acid	1.42%, 0.125 lbs/gal.

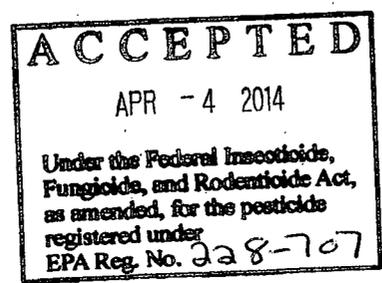
DO NOT SELL, DISTRIBUTE OR USE THE PRODUCT IN NASSAU AND SUFFOLK COUNTY IN NEW YORK.

KEEP OUT OF REACH OF CHILDREN CAUTION

PRECAUCION AL USUARIO: Si usted no puede leer o entender inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente. (TO THE USER: If you cannot read or understand English, do not use this product until the label has been fully explained to you.)

See inside booklet for FIRST AID and ADDITIONAL PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300 For Medical Emergencies Only, Call (877) 325-1840

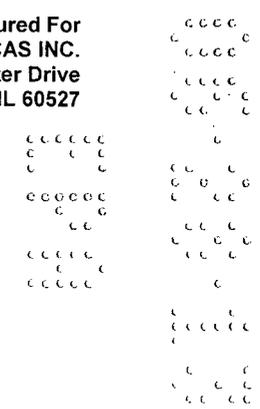


EPA REG. NO. 228-707
EPA EST. NO.

Manufactured For
NUFARM AMERICAS INC.
150 Harvester Drive
Burr Ridge, IL 60527

NET CONTENTS: GAL. (L)

000228-00707.20130606.MASTER (RV111010)
contradictions corrected



**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION/PRECAUCION**

Harmful if absorbed through skin. Harmful if swallowed. Avoid contact with skin, eyes or clothing. Causes moderate eye irritation.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Some materials that are chemical-resistant to this product are made of barrier laminate, butyl rubber or Viton. If you want more options, follow the instructions for category F on an EPA chemical-resistance category selection chart.

All mixers, loaders, applicators and other handlers must wear:

- long-sleeved shirt and long pants
- shoes and socks
- protective eyewear
- chemical-resistant gloves

See engineering controls for additional requirements.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Control Statement:

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d) (4-6)], the handler PPE may be reduced or modified as specified in the WPS. Pilots must use cockpits in a manner that meets requirements listed in the Worker Protections Standard (WPS) for agricultural pesticides CFR 170.240 (d)(4-6).

USER SAFETY RECOMMENDATIONS

Users Should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate.

This product has properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

FIRST AID

IF IN EYES	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
IF SWALLOWED	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.

4/10

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. READ ENTIRE LABEL BEFORE USING THIS PRODUCT. USE STRICTLY IN ACCORDANCE WITH LABEL PRECAUTIONARY STATEMENTS AND DIRECTIONS.

This pesticide should be used strictly in accordance with the drift and run-off precautions on this label in order to minimize off-site exposure.

Use of this product in certain portions of California, Oregon, and Washington is subject to the January 22, 2004 Order for injunctive relief in Washington Toxics Coalition, et al. v. EPA, C01 -01 32C, (W.D. WA).

For further information, please refer to <http://www.epa.gov/espp/litstatus/wtc/index.htm>.

Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased spray drift. Avoid spraying during conditions of low humidity and/or high temperatures.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about Personal Protective Equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- coveralls worn over short-sleeved shirt and short pants
- shoes plus socks
- chemical-resistant gloves made of any waterproof material
- protective eyewear

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter or allow people (or pets) to enter the treated area until sprays have dried.

This product is for use on Ornamental Turf Lawns (Residential, Industrial and Institutional), Parks, Cemeteries, Athletic Fields and Golf Courses (Fairways, Aprons, Tees* and Roughs); also for use on Sod Farms. This product should not be used in or near greenhouses. *Excluding Bentgrass Tees

USE PRECAUTIONS

Avoid drift of spray mist to vegetables, flowers, ornamental plants, shrubs, trees and other desirable plants. Do not pour spray solutions near desirable plants. Do not use on Centipede, St. Augustine, Dichondra, nor on lawns or turf where desirable clovers are present. Avoid fine mists. Use lawn type sprayer with coarse spray as wind drift is less likely. Avoid contact with exposed feeder roots of ornamentals and trees. Maximum control of weeds will be obtained from spring or early fall applications when weeds are actively growing. Use the higher rate for hard-to-control weeds. Do not exceed specified dosages for any area; be particularly careful within the dripline of tree and other ornamental species. Do not apply to newly seeded grasses until well established. Reseed no sooner than 3 to 4 weeks after application of this product. Avoid broadcast applications when air temperature exceeds 90°F. When using small spot treatment applications in temperature over 90°F, turf injury may occur.

When treating Carpetgrass, avoid broadcast applications when air temperature exceeds 80°F. When air temperatures exceed 80°F, limit application to spot treatment only.

The suitable use of this product on non-recommended turf species may be determined by treating a small area at any rate/acre which does not exceed 9 pints/acre. The treated area should be observed for any sign of turf injury for a period of 30 days of normal growing conditions to determine the phytotoxicity and efficacy to the treated area.

Adding oil, wetting agent, or other surfactant to the spray may be used to increase effectiveness on weeds but doing so may reduce selectivity to turf resulting in turf damage. Clean and rinse spray equipment using soap or detergent and water, and rinse thoroughly before reuse for other sprays.

Clean and rinse spray equipment using soap or detergent and water, and rinse thoroughly before reuse for other spraying. Do not apply this product through any type of irrigation system.

SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast, chemigation) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

Droplet Size

When applying sprays that contain 2,4-D as the sole active ingredient, or when applying sprays that contain 2,4-D mixed with active ingredients that require a Coarse or coarser spray, apply only as a Coarse or coarser spray (ASAE standard 572) or a volume mean diameter of 385 microns or greater for spinning atomizer nozzles.

When applying sprays that contain 2,4-D mixed with other active ingredients that require a Medium or more fine spray, apply only as a Medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition and there are not sensitive areas (including, but not limited to, residential areas, bodies of water, known habitat for nontarget species, nontarget crops) within 250 feet downwind. If applying a Medium spray, leave one swath unsprayed at the downwind edge of the treated field.

Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

Susceptible Plants

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to, cotton, okra, flowers, grapes (in growing stage), fruit trees (foliage), soybeans (vegetative stage), ornamentals, sunflowers, tomatoes, beans, and other vegetables, or tobacco. Small amounts of spray drift that might not be visible may injure susceptible broadleaf plants.

Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

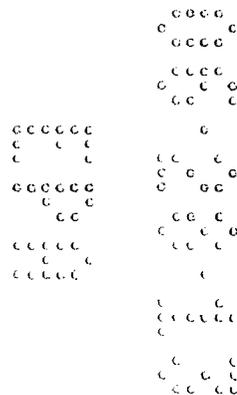
Equipment

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

For ground applications: Do not apply with a nozzle height greater than 4 feet above the crop canopy.

For aerial applications: The boom length must not exceed 75% of the wingspan of 90% of the rotor blade diameter. Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above crop canopy unless a greater height is required for aircraft safety. This requirement does not apply to forestry or right-of-way applications.

When applications are made with a crosswind, the swath will be displaced downwind. The applicator must compensate for this by adjusting the path of the aircraft upwind.



ORNAMENTAL LAWNS AND TURF

Apply this product at the rate of 6 to 9 pints in 20 to 240 gallons of water per acre (2.25 to 3.3 fluid ounces in 0.5 to 5.5 gallons of water per 1,000 square feet) to control weeds growing in turf planted to Bluegrass, Fescue, Ryegrass, Bentgrass (excluding golf course greens and tees), Bahia, Bermudagrass and Zoysia.

Note: On closely mowed golf course fairway bentgrass, apply this product at a maximum rate of 6 pints in 20 to 240 gallons of water per acre (2.25 fluid ounces in 0.5 to 5.5 gallons of water per 1,000 square feet). During conditions which promote turf stress use lower rates, 3 to 4.5 pints in 20 to 240 gallons of water, per acre (1.08 to 1.65 fluid ounces in 0.3 to 5.5 gallons per 1,000 square feet). Slight turf yellowing will disappear after one week. To minimize grass injury, a second application should not be made for at least 4 weeks. Avoid swath overlaps. Do not use on golf course greens or tees.

Lower Volume Equipment: Use as little as 5 gallons of water per acre. Use only application equipment that is capable of spreading a uniform droplet, wetting each weed surface.

NOTE: For all grasses (1) do not overlap spray patterns; and (2) use reduced rates if grass is stressed from heat, drought, etc.

Limitations for Use on Ornamental Turf: The maximum rate per application is 11.25 pints per acre, limited to 2 applications per year. The maximum seasonal rate is 22.5 pints per acre, excluding spot treatments. Do not exceed 2.0 lb. dicamba and 3.0 lb. 2,4-D per acre per year. Reseed no sooner than 3 to 4 weeks after application of this product.

SOD FARMS

This product is intended for use on sod farms. This herbicide provides selective broadleaf control in warm season and cool season turfgrass established for commercial sod production.

Timing

Apply this herbicide to broadleaf weeds that are actively growing. Follow-up applications may be required for dense infestations of perennial and biennial weeds. Do not apply this product to St. Augustinegrass.

The application of this herbicide to grass seedlings is not recommended until after the second mowing.

The application of this product to newly sodded, sprigged, or plugged grasses should be delayed until 3 to 4 weeks after the sodding, sprigging, or plugging operations. Also, applications to dormant Bermudagrass, dormant Zoysiagrass and dormant Bahiagrass are suggested.

Rates for Sod Farms

For Bluegrass, Ryegrass and Fescue, apply 6 to 9 pints per acre. For Creeping Bentgrass use 3.75 pints per acre. For Common and Hybrid Bermudagrass, Bahia and Zoysia grass apply 4.5 to 5.4 pints per acre. Spray volume for Sod Farm application is 5 to 175 gallons per acre.

Generally, the lower application rates will provide satisfactory control of sensitive weeds. The higher application rates will be required for dense infestations of perennial weeds, for adverse/extreme environmental conditions, or for weeds beyond the appropriate growth stages.

Limitations for Use on Sod:

The maximum rate per application is 15 pints per acre, limited to 2 applications per year. Minimum of 21 days between applications.

NON-TURF AREAS

Roadsides (including aprons and guardrails, rights-of-way, fencerows, hedgerows, ditches, utility, pipelines, powerlines, railroads, airports, commercial plants, storage and lumber yards, barrier strips and firebreaks, equipment areas, nurseries and ornamental plantings, fuel tank farms, pumping stations and other industrial sites.

Roadsides (including aprons and guardrails) and rights-of-way: For control of broadleaf weeds, mix at a rate of 6 to 15 pints of this product per acre in adequate water to thoroughly saturate all weeds with spray mixture. This may require a spray volume of 50 to 300 gallons of water per acre. Apply any time between the time when plants come into full leaf (spring) to when the plants begin to go dormant. Best results are obtained when weeds are young and actively growing. Do not cut weeds until herbicide has translocated throughout the plant causing root death. For small broadleaf weeds, use the lower rate. Heavy, dense stands require the higher rate with high water volume. For small (spot) applications with small tank sprayers, apply at the rate of 6-3/4 ounces of this product per gallon of water and spray to thoroughly wet all foliage.

For control of woody plants: Apply to both stems and foliage any time from the time foliage is completely matured until the time plants start to go dormant. All leaves, stems and suckers must be completely wet to the ground line for effective control. Regrowth may be anticipated on the more resistant species. Add 12 to 15 pints of this product per acre in adequate water to thoroughly saturate all weeds with the spray mixture. This may require a spray volume of 200 to 600 gallons of water per acre depending upon the height and thickness of the brush. Mix thoroughly before spraying.

Limitations for Non-Turf Areas:

For annual and perennial weeds, the maximum rate per application is 15 pints per acre, limited to 2 applications per year. Minimum of 30 days between applications. For woody plants, the maximum rate per application is 10 pints per acre, limited to 4 applications per year.

Applications to non-cropland areas are not applicable to treatment of commercial timber or other plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes.

COMPATIBILITY

This product can be mixed with some liquid fertilizers or liquid iron materials. Because liquid fertilizers and liquid iron differ in pH, free ammonia content, density, salt concentration and percentage of water, a compatibility test (given below) is recommended prior to mixing in the application equipment. All regulations, either State or Federal, relating to the application of liquid fertilizers or liquid iron and this product must be strictly followed. The following compatibility test should always be performed prior to full-scale mixing.

1. Pour 18 fluid ounces of water into a quart jar.
2. Add 1 fluid ounce of either the liquid fertilizer or liquid iron to be used.
3. Add 1 fluid ounce of this product.
4. Close jar and shake well.
5. Watch the mixture for several seconds after shaking and check again after 30 minutes.
6. If the mixture does not show signs of separating, the combination may be used. If the mixture foams excessively, gels, separates or gets very thick, do not combine for field application.
7. Compatibility may be improved by the use of a compatibility agent. Some suggested compatibility agents to try are Kalo Laboratories Complex, Farm Chemicals Inc.'s Compat, Harcros Chemicals' T-Mulz 734-2, Rigo Company's Rigo Compatibility Agent, Witco Chemical's Sponto 168D, Amoco Oil's Amoco Spray Mate and Universal Coop.'s Chem-Link. These agents are all used in the same manner. Follow the previously outlined test procedures and add 1/6 ounce of the compatibility agent between steps (the compatibility agent must be added to the fertilizer or iron before adding the product).
8. If the mixture does not separate, gel, foam or get very thick, it may be used for field application. Mix only the amount to be sprayed. Do not allow to stand overnight.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Always use original container to store pesticides in a secured warehouse or storage building. Store at temperatures above 25 F. Protect product from freezing. If allowed to freeze, remix well before using. This does not alter this product. Containers should be opened in well-ventilated areas. Keep container tightly sealed when not in use. Do not stack cardboard cases more than two pallets high. Do not store near open containers of fertilizer, seed or other pesticides.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. If container is damaged or if pesticide has leaked, contain all spillage. Absorb and clean up all spilled material with granules or sand. Place in a closed, labeled container for proper disposal. Improper disposal of excess pesticide, spray mixtures, or rinsate is a violation of Federal law and may contaminate groundwater. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

FOR COMMERCIAL USE

CONTAINER DISPOSAL: Nonrefillable Containers 5 Gallons or Less: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

Nonrefillable containers larger than 5 gallons: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. If recycling or reconditioning not available, puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

OR

Refillable containers larger than 5 gallons: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 20% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

FOR RESIDENTIAL USE

CONTAINER DISPOSAL: If empty - Do not reuse this container. Place in trash or offer for recycling if available. **If partly filled** - If product cannot be used as directed, call your local solid waste agency for disposal instructions. Never place unused product down any indoor (including toilet) or outdoor (including sewer) drain.

